

ABSTRACT

In a communication unit 100, a ground layer section 101 which is a sheet-like conductive material and a power-source layer section 102 which is a sheet-like conductive material are laid out in such a way that their one sides face each other, a voltage is applied in such a way that the power-source layer section 102 has a predetermined reference electric potential to the ground layer section 101, a plurality of conductive layer sections 103 which are sheet-like conductive materials are laid out between the ground layer section 101 and the power-source layer section 102, each conductive layer section 103 and the power-source layer section 102 are coupled together by a pull-resistor section 104, communication elements are so connected as to be laid over the individual conductive layer sections 103, a transmission communication element connected to a conductive layer section 103 transmits a signal by changing the electric potential of the conductive layer section 103 connected to that communication element with respect to the ground layer section 101 and transmits a signal, and a reception communication element connected to the same conductive layer section 103 receives the signal by directly or indirectly detecting a change in the electric potential of the conductive layer section 103.